<u>REMARKS</u>

This application has been carefully reviewed in light of the Office Action dated February 26, 2004. Claims 1 to 21 and 23 to 37 remain in the application, with Claim 22 having been cancelled. Claims 1, 9, 21 and 32 to 37 are the independent claims. Reconsideration and further examination are respectfully requested.

The drawings were objected to for Fig. 2B including a reference numeral (7b) allegedly not described in the specification. Applicants direct the Examiner's attention to page 7, lines 24 to 26, which state: "However, when a character (TEXT) image is included in the natural image like an image 7b shown in Fig. 2B, ..." Thus, the objection is traversed and the Examiner is requested to withdraw the objection to the drawings.

All of the claims were rejected under 35 U.S.C. § 103(a), with Claims 1, 3, 5 to 8, 21 to 23, 32, 33, 36 and 37 being rejected over U.S. Patent No. 5,659,407 (Andresen), Claims 2 and 4 being rejected over Andresen in view of U.S. Patent No. 5,483,361 (Shimizu), Claims 9 to 14, 34 and 35 being rejected over U.S. Patent No. 5,436,981 (Ishikawa), Claims 15 to 20 being rejected over Ishikawa in view of Shimizu, and Claims 24 to 31 being rejected over Andresen in view of Ishikawa. Reconsideration and withdrawal of the rejections are respectfully requested.

The present invention concerns processing different types of bitmap images for printout. According to one aspect of the invention, if first and second bitmap image data generated in accordance with first and second commands overlap each other, attribute information is synthesized at the overlapped position of the first bitmap image data and attribute information is synthesized at the overlapped position of the second bitmap image data in accordance with a predetermined rule. As a result, if an image to be printed out contains text data that overlays a photograph or graphics data, the rendering of the overlapping images can be synthesized so as to obtain a better printout.

Referring specifically to the claims, amended independent Claim 1 is an image processing apparatus comprising attribute information generation means for generating attribute information indicating an attribute of an image in correspondence with a command that represents the image, bitmap data generation means for generating bitmap image data by rendering the command, attribute synthesis means for, if first and second bitmap image data generated in accordance with first and second commands overlap each other, synthesizing attribute information at the overlapped position of the first bitmap image data and attribute information at the overlapped position of the second bitmap image data in accordance with a predetermined rule, and image processing means for performing an image process on the bitmap image data in accordance with the attribute information.

Amended independent Claims 32 and 33 are method and storage medium claims, respectively, that substantially correspond to Claim 1.

The applied art, alone or in any permissible combination, is not seen to disclose or to suggest the features of Claims 1, 32 and 33. More particularly, the applied art is not seen to disclose or to suggest at least the feature of an attribute synthesis means/step for, if first and second bitmap image data generated in accordance with first and second commands overlap each other, synthesizing attribute information at the overlapped position of the first bitmap image data and attribute information at the overlapped position of the second bitmap image data in accordance with a predetermined rule.

Andresen is merely seen to disclose dividing a page to be rendered into non-overlapping regions. However, since the objects to be rendered in Andresen are divided into non-overlapping regions, Andresen is not seen to synthesize attribute information at the overlapped positions. Accordingly, Andresen is not seen to disclose or to suggest at least the feature of an attribute synthesis means/step for, if first and second bitmap image data generated in accordance with first and second commands overlap each other, synthesizing attribute information at the overlapped position of the first bitmap

image data and attribute information at the overlapped position of the second bitmap image data in accordance with a predetermined rule.

Shimizu has been studied but is not seen to add anything that, when combined with Andresen, would have disclosed or suggested at least the feature of an attribute synthesis means/step for, if first and second bitmap image data generated in accordance with first and second commands overlap each other, synthesizing attribute information at the overlapped position of the first bitmap image data and attribute information at the overlapped position of the second bitmap image data in accordance with a predetermined rule.

In view of the foregoing, amended independent Claims 1, 32 and 33, as well as the claims dependent therefrom, are believed to be allowable.

Amended independent Claim 9 includes features along the lines of Claim 1, but is directed specifically to an image processing apparatus comprising discrimination means for discriminating a type of object in an image to be rendered, determination means for determining the presence/absence of synthesis of the discriminated object with other objects, first synthesis means for synthesizing objects in accordance with the determination result, second synthesis means for synthesizing object type information of objects discriminated by the discrimination means, and processing means for appending object type information synthesized by the second synthesis means to a rendering result obtained by rendering the object to be rendered in units of pixels.

Amended independent Claims 34 and 35 are method and storage medium claims, respectively, that substantially correspond to Claim 9.

The applied art is not seen to disclose or to suggest the features of Claims 9, 34 and 35, and in particular, is not seen to disclose or to suggest at least the feature of determining the presence/absence of synthesis of a discriminated object with other objects, synthesizing objects in accordance with the determination result, and synthesizing object type information of discriminated objects.

- 14 -

Ishikawa merely discloses separating an image into a bitmap command representing a line image and a bitmap command representing a half-tone image in order to generate layout information. However, Ishikawa is not believed to disclose or to suggest at least the feature of determining the presence/absence of synthesis of a discriminated object with other objects, synthesizing objects in accordance with the determination result, and synthesizing object type information of discriminated objects. Thus, amended independent Claims 9, 34 and 35, as well as the claims dependent therefrom, are believed to be allowable over Ishikawa.

Referring now to amended independent Claim 21, the claimed invention is an image processing apparatus for processing and outputting input image data, comprising input means for inputting image data composed of a plurality of objects, rendering means for rendering the objects into bitmap image data, generation means for generating attribute map information indicating a configuration of the bitmap image data on the basis of the bitmap image data rendered by the rendering means and attributes of the objects, and determination means for determining a range of the bitmap image data, which is to undergo an image area discrimination of discriminating a character/line image region, on the basis of the attribute map information generated by the generation means.

Amended independent Claims 36 and 37 are method and storage medium claims, respectively, that substantially correspond to Claim 21.

The applied art is not seen to disclose or to suggest the features of Claim 21, 36 and 37, and in particular, the applied art is not seen to disclose or to suggest at least the feature of determining a range of the bitmap image data, which is to undergo an image area discrimination of discriminating a character/line image region, on the basis of the attribute map information generated by the generation means.
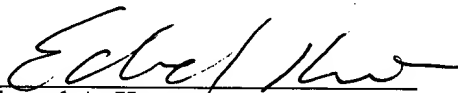
Andresen is merely seen to disclose separating an image into R, G, and B frame buffers in accordance with attribute information. Thus, Andresen merely separates an image based on color information, independent of any information indicating a

- 15 -

character/line region. Accordingly, Andresen is not seen to disclose or to suggest at least the feature of determining a range of the bitmap image data, which is to undergo an image area discrimination of discriminating a character/line image region, on the basis of the attribute map information generated by the generation means, and therefore, Claims 21, 36 and 37 are believed to be allowable.

In view of the foregoing amendments and remarks, the entire application is believed to be in condition for allowance and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office by telephone at (714) 540-8700. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

Edward A. Kmett
Attorney for Applicants

Registration No. 42,746

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

CA_MAIN 82880v1